



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R07-OAR-2017-0349; FRL-9979-84-Region 7]

Approval of Missouri Air Quality Implementation Plans;

Redesignation of the Missouri Portion of the St. Louis-St.

Charles-Farmington, MO-IL 2008 Ozone Area to Attainment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a request from the Missouri Department of Natural Resources (MDNR) to redesignate the Missouri portion of the St. Louis-St. Charles-Farmington, MO-IL nonattainment area ("St. Louis area" or "area") to attainment for the 2008 ozone National Ambient Air Quality Standard (NAAQS). MDNR submitted this request on September 12, 2016, with a supplemental submission on February 16, 2018, to include a revised motor vehicle emissions budget. EPA is proposing this action because the request meets the statutory requirements for redesignation under the Clean Air Act (CAA). As part of this action, EPA is also proposing to approve, as a revision to the Missouri State Implementation Plan (SIP), the state's plan for maintaining the 2008 8-hour ozone NAAQS through 2030. Finally, EPA finds adequate and is proposing

to approve, as a SIP revision, the State's 2030 volatile organic compound (VOC) and oxides of nitrogen (NO_x) Motor Vehicle Emission Budgets (MVEBs) for the Missouri portion of the St. Louis area. EPA addressed the Illinois portion of the St. Louis area in a separate rulemaking action on March 1, 2018. 83 FR 8756.

DATES: Comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R07-OAR-2017-0349, to <https://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional

submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www2.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Lachala Kemp, Environmental Protection Agency, Air Planning and Development Branch, 11201 Renner Boulevard, Lenexa, Kansas 66219 at (913) 551-7214, or by email at kemp.lachala@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document "we," "us," and "our" refer to EPA. This section provides additional information by addressing the following:

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I. What is Being Addressed in this Document?

EPA is proposing to approve MDNR's request to change the designation of the Missouri portion of the St. Louis area from nonattainment to attainment for the 2008 ozone NAAQS, based on quality-assured and certified data monitoring data for 2013-2015, and that the Missouri portion of the St. Louis area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA.

EPA is also proposing to approve the state's maintenance plan as a revision to the Missouri SIP; the maintenance plan is designed to keep the Missouri portion of the St. Louis area in attainment of the 2008 ozone NAAQS through 2030.

Finally, EPA finds adequate and is proposing to approve into the SIP the newly-established 2030 MVEBs for the area. The adequacy comment period for the MVEBs began on April 10, 2018, with EPA's posting of the availability of Missouri's submittal on EPA's Adequacy Web site (at <https://www.epa.gov/state-and-local-transportation/adequacy-review-state-implementation-plan-sip-submissions-conformity>). The adequacy comment period for these MVEBs ended on May 10, 2018. EPA did not receive any adverse comments on this submittal during the adequacy comment period. In a letter dated May 15, 2018, EPA informed Missouri

that the 2030 MVEBs are adequate for use in transportation conformity analyses. Please see section V.B. of this rulemaking, "What is the status of EPA's adequacy determination for the proposed VOC and NO_x MVEBs for the St. Louis area?" for further explanation of this process.

II. Background Information

EPA has determined that ground-level ozone is detrimental to human health. On March 12, 2008, EPA promulgated a revised 8-hour ozone NAAQS of 0.075 parts per million (ppm). See 73 FR 16436 (March 27, 2008). Under EPA's regulations at 40 CFR part 50, the 2008 8-hour ozone NAAQS is attained when the three-year average of the annual fourth highest daily maximum 8-hour average concentration is equal to or less than 0.075 ppm at all of the ozone monitoring sites in the area. See 40 CFR 50.15 and appendix P to 40 CFR part 50.

Upon promulgation of a new or revised NAAQS, section 107(d)(1)(B) of the CAA requires EPA to designate as nonattainment any areas that are violating the NAAQS based on the most recent three years of quality assured ozone monitoring data. The St. Louis area was designated as a marginal nonattainment area for the 2008 ozone NAAQS on May 21, 2012 (77 FR 30088); the designation became effective on July 20, 2012.

In a final implementation rule for the 2008 ozone NAAQS (SIP Requirements Rule)¹, EPA established ozone standard attainment dates based on table 1 of CAA section 181(a). For the areas classified as marginal nonattainment, this established an attainment date three years after the July 20, 2012 effective date.

CAA section 181(b)(2) requires EPA to determine, based on an area's ozone design value as of the area's attainment deadline, whether the area has attained the ozone standard by that date. The statute provides a mechanism by which states that meet certain criteria may request, and be granted by the Administrator, a one year extension of an area's attainment deadline. On May 4, 2016, based on EPA's evaluation and determination that the areas met the criteria of CAA section 181(a)(5), EPA granted the St. Louis area a one year extension of the marginal area attainment date; the revised attainment date became July 20, 2016. 81 FR 26697.

On June 27, 2016, in accordance with CAA section 181(b)(2)(A) and the provisions of the SIP Requirements Rule,

¹ This rule, titled "Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements," published on March 6, 2015. 80 FR 12264. The rule addresses nonattainment area SIP requirements for the 2008 ozone NAAQS, including requirements pertaining to attainment demonstrations, reasonable further progress (RFP), reasonably available control technology (RACT), reasonably available control measures (RACM), new source review (NSR), emission inventories, and the timing requirements for SIP submissions and compliance with emission control measures in the SIP. This rule also addresses the revocation of the 1997 ozone NAAQS and the antibacksliding requirements that apply when the 1997 ozone NAAQS is revoked.

EPA determined that the St. Louis area attained the 2008 8-hour ozone standard by its July 20, 2016, attainment date. 81 FR 41444. EPA's determination was based upon three years of complete, quality assured and certified data for the 2013-2015 time period.

On September 12, 2016, with a supplemental revision on February 16, 2018, Missouri submitted to EPA a request to redesignate the Missouri portion of the St. Louis area, to attainment for the 2008 ozone NAAQS, and to approve the maintenance plan for that area, including the 2030 MVEBs, as a revision to the SIP.

III. What are the Criteria for Redesignation?

Section 107(d)(3)(E) of the CAA allows redesignation of a nonattainment area to attainment of the NAAQS provided that: (1) the Administrator determines that the area has attained the NAAQS; (2) the Administrator has fully approved the applicable implementation plan for the area under section 110(k) of the CAA; (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP, applicable Federal air pollutant control regulations, and other permanent and enforceable emission reductions; (4) the

Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A of the CAA; and (5) the state containing the area has met all requirements applicable to the area for the purposes of redesignation under section 110 and part D of the CAA.

On April 16, 1992, EPA provided guidance on redesignations in the General Preamble for the Implementation of Title I of the CAA Amendments of 1990 (57 FR 13498) and supplemented this guidance on April 28, 1992 (57 FR 18070). EPA has provided further guidance on processing redesignation requests in the following documents:

1. "Ozone and Carbon Monoxide Design Value Calculations," Memorandum from Bill Laxton, Director, Technical Support Division, June 18, 1990;
2. "Maintenance Plans for Redesignation of Ozone and Carbon Monoxide Nonattainment Areas," Memorandum from G.T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, April 30, 1992;
3. "Contingency Measures for Ozone and Carbon Monoxide (CO) Redesignations," Memorandum from G.T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, June 1, 1992;
4. "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air

Quality Management Division, September 4, 1992 (the "Calcagni Memorandum");

5. "State Implementation Plan (SIP) Actions Submitted in Response to Clean Air Act (CAA) Deadlines," Memorandum from John Calcagni, Director, Air Quality Management Division, October 28, 1992;

6. "Technical Support Documents (TSDs) for Redesignation of Ozone and Carbon Monoxide (CO) Nonattainment Areas," Memorandum from G.T. Helms, Chief, Ozone/Carbon Monoxide Programs Branch, August 17, 1993;

7. "State Implementation Plan (SIP) Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) National Ambient Air Quality Standards (NAAQS) On or After November 15, 1992," Memorandum from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation, September 17, 1993;

8. "Use of Actual Emissions in Maintenance Demonstrations for Ozone and CO Nonattainment Areas," Memorandum from D. Kent Berry, Acting Director, Air Quality Management Division, November 30, 1993;

9. "Part D New Source Review (part D NSR) Requirements for Areas Requesting Redesignation to Attainment," Memorandum from Mary D.

Nichols, Assistant Administrator for Air and Radiation, October 14, 1994; and

10. "Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard," Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, May 10, 1995.

IV. What is EPA's Analysis of Missouri's Redesignation Request?

A. Criteria (1)- The St. Louis area has Attained the 2008-Hour Ozone NAAQS

For redesignation of a nonattainment area to attainment, the CAA section 107(d)(3)(E)(i) requires EPA to determine that the area has attained the applicable NAAQS. An area is attaining the 2008 ozone NAAQS if it meets the 2008 ozone NAAQS, as determined in accordance with 40 CFR 50.15 and appendix P of part 50, based on three complete, consecutive calendar years of quality assured air quality data for all monitoring sites in the area. To attain the NAAQS, the three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentrations (ozone design values) at each monitor must not exceed 0.075 ppm. The air quality data must be collected and quality-assured in accordance with 40 CFR part 58 and recorded in EPA's Air Quality System (AQS). Ambient air quality monitoring data for the three year period must also meet data completeness requirements. An

ozone design value is valid if daily maximum 8-hour average concentrations are available for at least 90 percent of the days within the ozone monitoring seasons², on average, for the three-year period, with a minimum data completeness of 75 percent during the ozone monitoring season of any year during the three year period. See section 2.3 of appendix P to 40 CFR part 50.

On June 27, 2016, in accordance with CAA section 181(b)(2)(A) and the provisions of the SIP Requirements Rule, EPA determined that the St. Louis area attained the 2008 ozone NAAQS by its July 20, 2016, attainment date. See 81 FR 41444. EPA's determination was based upon three years of complete, quality assured and certified data that had been recorded in AQS for the 2013-2015 time period. The data demonstrated that the St. Louis area is attaining the 2008 ozone NAAQS. The annual fourth-highest 8-hour ozone concentrations and the three-year average of these concentrations (monitoring site ozone design values) for each monitoring site are summarized in table 1.

² The ozone season is defined by state in 40 CFR 58 appendix D. The ozone season for the St. Louis area runs from March-October.

Table 1:
Annual 4th highest daily maximum 8-hour ozone concentrations and 3-year averages for the St. Louis-St. Charles-Farmington, MO-IL area.

County	Monitoring Site Name	4 th Highest Values			2013-2015 Design Value (ppm)
		2013 (ppm)	2014 (ppm)	2015 (ppm)	
St. Charles, MO	Orchard Farm	0.071	0.072	0.066	0.069
St. Charles, MO	West Alton	0.071	0.072	0.070	0.071
St. Louis City, MO	Blair Street	0.066	0.066	0.063	0.065
St. Louis, MO	Maryland Heights	0.070	0.072	0.069	0.070
St. Louis, MO	Pacific	0.067	0.065	0.065	0.065
Jefferson, MO	Arnold West	0.069	0.072	0.069	0.070
Madison, IL	Alhambra	0.071	0.068	0.067	0.068
Madison, IL	Alton	0.072	0.072	0.069	0.071
Madison, IL	Maryville	0.075	0.070	0.064	0.069
Madison, IL	Wood River	0.069	0.070	0.069	0.069
St. Clair, IL	East St. Louis	0.066	0.067	0.066	0.066

The most recent certified, quality assured data for 2017 indicates that the area continues to attain the 2008 ozone NAAQS. If the design value of a monitoring site in the area exceeds the NAAQS after proposal, but before final approval of the redesignation, EPA will not take final action to approve the redesignation of the St. Louis area to attainment.

The three-year ozone design value for 2013-2015 is 0.071 ppm³, which meets the 2008 ozone NAAQS. Therefore, in this action, EPA proposes to determine that the St. Louis area is attaining the 2008 ozone NAAQS.

³ The ozone design value for the monitor with the highest three-year averaged concentration.

B. Criteria (2) - Missouri Has a Fully Approved SIP Under Section 110(k) for the St. Louis area; and Criteria (5) - Missouri Has Met All Applicable Requirements for the St. Louis Area of Section 110 and part D of the CAA

As criteria for redesignation of an area from nonattainment to attainment of a NAAQS, the CAA requires EPA to determine that the state has met all applicable requirements under CAA section 110 and part D of title I of the CAA (see section 107(d)(3)(E)(v) of the CAA) and that the state has a fully approved SIP under CAA section 110(k) (see section 107(d)(3)(E)(ii) of the CAA). EPA proposes to find that Missouri has met all currently applicable SIP requirements for purposes of redesignation of the St. Louis area to attainment of the 2008 ozone standard under section 110 and part D of the CAA in accordance with section 107(d)(2)(E)(v). In making these proposed determinations, EPA ascertained which CAA requirements are applicable to the St. Louis area and the Missouri SIP and, if applicable, whether the required Missouri SIP elements are fully approved under section 110(k) and part D of the CAA. As discussed more fully below, SIPs must be fully approved only with respect to currently applicable requirements of the CAA.⁴

⁴ See section 175A(c) of the CAA. See September 4, 1992 Calcagni Memorandum. See *Sierra Club v. EPA*, 375

1. Missouri has Met All Applicable Requirements of section 110 and part D of the CAA Applicable to the Missouri Portion of the St. Louis Area for Purposes of Redesignation.

General SIP Requirements. Section 110(a)(2) of the CAA delineates the general requirements for a SIP. Section 110(a)(2) provides that the SIP must have been adopted by the state after reasonable public notice and hearing, and that, among other things, it must: (1) include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the CAA; (2) provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor ambient air quality; (3) provide for implementation of a source permit program to regulate the modification and construction of stationary sources within the areas covered by the plan; (4) include provisions for the implementation of part C prevention of significant deterioration (PSD) and part D new source review (NSR) permit programs; (5) include provisions for stationary source emission control measures, monitoring, and reporting; (6) include provisions for

F.3d 537 (7th Cir. 2004). *See also* 68 FR 25418 (May 12, 2003, pages 68 FR 25424 and 68 FR 25427) (redesignation of the St. Louis/East St. Louis area to attainment of the 1-hour ozone NAAQS). *See also* the September 17, 1993, Michael Shapiro memorandum and 60 FR 12459, 60 FR 12465 - 60 FR 12466 (March 7, 1995) (redesignation of Detroit Ann Arbor, Michigan to attainment of the 1-hour ozone NAAQS)

air quality modeling; and, (7) provide for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) of the CAA requires SIPs to contain measures to prevent sources in a state from significantly contributing to air quality problems in another state. To implement this provision, EPA has required certain states to establish programs to address transport of certain air pollutants.⁵ However, like many of the 110(a)(2) requirements, the section 110(a)(2)(D) SIP requirement is not linked with a particular area's ozone designation and classification. EPA believes that the SIP requirements linked with the area's ozone designation and classification are the relevant measures to evaluate when reviewing a redesignation request for the area. The section 110(a)(2)(D) requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area within the state. Thus, EPA does not believe these requirements should be construed to be applicable requirements for the purposes of redesignation.⁶

⁵ Nitrogen oxides (NO_x) are precursor pollutants to ozone formation. On October 27, 1992 (63 FR 57356), EPA issued a NO_x SIP call requiring 22 states and the District of Columbia to reduce emissions of NO_x in order to reduce the transport of ozone and ozone precursors.

⁶ See 65 FR 37890 (June 15, 2000), 66 FR 50399 (October 19, 2001), 68 FR 25418, 68 FR 25426-27 (May 13, 2003).

In addition, EPA believes that other section 110 elements are neither connected with nonattainment plan submissions, nor linked with an area's ozone attainment status and are not applicable requirements for purposes of redesignation. The area will still be subject to these requirements after the area is redesignated to attainment for the 2008 ozone NAAQS. The section 110 and part D requirements which are linked with a particular area's designation and classification are the relevant measures to evaluate when reviewing a redesignation request. This approach is consistent with EPA's existing policy on applicability (i.e., for redesignations) of conformity and oxygenated fuels requirements, as well as with section 184 ozone transport requirements.⁷ EPA has reviewed Missouri's SIP revision and has concluded that it meets the general SIP requirements under section 110 of the CAA to the extent that those requirements are applicable for purposes of redesignation. On March 22, 2018 (83 FR 12496), EPA approved elements of the SIP submitted by Missouri to meet the requirements of section 110 for the 2008 ozone standard. The requirements of section 110(a)(2), however, are statewide requirements that are not

⁷ See Reading, Pennsylvania proposed and final rulemakings, 61 FR 53174- 61 FR 53176 (October 10, 1996) and 62 FR 24826 (May 7, 1997); Cleveland-Akron-Loraine, Ohio final rulemaking, 61 FR 20458 (May 7, 1996); and Tampa, Florida final rulemaking, 60 FR 62748 (December 7, 1995). See also the discussion of this issue in the Cincinnati, Ohio ozone redesignation (65 FR 37890, June 19, 2000), and the Pittsburgh, Pennsylvania ozone redesignation (66 FR 50399, October 19, 2001).

linked to the ozone nonattainment status of the St. Louis area. Therefore, EPA concludes that these infrastructure requirements are not applicable requirements for purposes of review of the state's ozone redesignation request.

Part D Requirements. Section 172(c) of the CAA sets forth the basic requirements of air quality plans for states with nonattainment areas that are required to submit them pursuant to section 172(b). Subpart 2 of part D, which includes section 182 of the CAA, establishes specific requirements for ozone nonattainment areas depending on the areas' nonattainment classifications.

The Missouri portion of the St. Louis area was classified as marginal under subpart 2 for the 2008 ozone NAAQS. As such, the area is subject to the subpart 1 requirements contained in section 172(c) and section 176. Similarly, the area is subject to the subpart 2 requirements contained in section 182(a) (marginal nonattainment area requirements). A thorough discussion of the requirements contained in section 172(c) and 182 can be found in the General Preamble for Implementation of title I (57 FR 13498).

Subpart 1 Section 172 Requirements. As provided in subpart 2, for marginal ozone nonattainment areas such as the St. Louis

area, the specific requirements of section 182(a) apply in lieu of the attainment planning requirements that would otherwise apply under section 172(c), including the attainment demonstration and reasonably available control measures (RACM) under section 172(c)(1), reasonable further progress (RFP) under section 172(c)(2), and contingency measures under section 172(c)(9).⁸

Section 172(c)(3) requires submission and approval of a comprehensive, accurate and current inventory of actual emissions. This requirement is superseded by the inventory requirement in section 182(a)(1) discussed below.

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources in an area, and section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA most recently approved Missouri's NSR program on June 4, 2015 (80 FR 31844).⁹ EPA has determined that, since PSD requirements will apply after redesignation, areas being redesignated need not comply with the requirement that a NSR

⁸ See 42 U.S.C. 7511a(a).

⁹The "Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard" submitted by the state on September 9, 2014 noted that the state's NSR program was approved by EPA and that no "corrections" needed to be made in the SIP. This SIP revision was approved on February 25, 2016 (81 FR 9346).

program be approved prior to redesignation, provided that the area demonstrates maintenance of the NAAQS without part D NSR. A more detailed rationale for this view is described in the Nichols Memorandum. *See also* rulemakings for the Illinois portion of the St. Louis Area (77 FR 34819, 77 FR 34826, June 12, 2012); Louisville, Kentucky (66 FR 53665, 66 FR 53669, October 23, 2001); Grand Rapids, Michigan (61 FR 31831, 61 FR 31834-61 FR 31837, June 21, 1996); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 61 FR 20469-61 FR 20470, May 7, 1996); Detroit, Michigan (60 FR 12459, 61 FR 12467-61 FR 12468, March 7, 1995). Missouri has demonstrated that the area will be able to maintain the standard without part D NSR in effect; therefore, EPA concludes that the state need not have a fully approved part D NSR program prior to approval of the redesignation request. Missouri's PSD program will become effective in the area upon redesignation to attainment.

Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the NAAQS. Because attainment has been reached, no additional measures are needed to provide for attainment.

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, we believe the

Missouri SIP meets the requirements of section 110(a)(2) for purposes of redesignation.

Subpart 1 Section 176 Conformity Requirements. Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that Federally supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs and projects that are developed, funded or approved under title 23 of the United States Code (U.S.C.) and the Federal Transit Act (transportation conformity) as well as to all other Federally supported or funded projects (general conformity). State transportation conformity SIP revisions must be consistent with Federal conformity regulations relating to consultation, enforcement and enforceability that EPA promulgated pursuant to its authority under the CAA.

EPA interprets the conformity SIP requirements as not applying for purposes of evaluating a redesignation request under section 107(d) because state conformity rules are still required after redesignation and Federal conformity rules apply where state conformity rules have not been approved.¹⁰ See *Wall*

¹⁰ CAA section 176(c)(4)(E) requires states to submit revisions to their SIPs to reflect certain Federal criteria and procedures for determining transportation conformity. Transportation conformity SIPs are different from SIPs requiring the development of Motor Vehicle Emission Budgets (MVEBs), such as control strategy SIPs and maintenance plans.

v. EPA, 265 F.3d 426 (6th Cir. 2001) (upholding this interpretation); see also 60 FR 62748 (December 7, 1995) (redesignation of Tampa, Florida). Nevertheless, Missouri has an approved conformity SIP for the St. Louis-St. Charles-Farmington, MO-IL area. See 78 FR 53247 (August 29, 2013).

Section 182(a) Requirements. Section 182(a)(1) requires states to submit a comprehensive, accurate, and current inventory of actual emissions from sources of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) emitted within the boundaries of the ozone nonattainment area. The state's "Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard" submitted by the state on September 9, 2014, included a 2011 base year emissions inventory for the Missouri portion of the St. Louis area. EPA approved this emissions inventory as a revision to the Missouri SIP on February 25, 2016 (81 FR 9346).

Under section 182(a)(2)(A), states with ozone nonattainment areas that were designated before the enactment of the 1990 CAA amendments were required to submit, within six months of classification, all rules and corrections to existing VOC reasonably available control technology (RACT) rules that were

required under section 172(b)(3) before the 1990 CAA amendments. The St. Louis area is not subject to the section 182(a)(2) RACT "fix up" requirement for the 2008 ozone NAAQS because it was designated as nonattainment for this standard after the enactment of the 1990 CAA amendments and because Missouri complied with this requirement for the St. Louis area under the prior 1-hour ozone NAAQS.¹¹

Section 182(a)(2)(B) requires each state with a marginal ozone nonattainment area that implemented or was required to implement a vehicle inspection and maintenance (I/M) program before the 1990 CAA amendments to submit a SIP revision for an I/M program no less stringent than that required prior to the 1990 CAA amendments or already in the SIP at the time of the CAA amendments, whichever is more stringent. For the purposes of the 2008 ozone standard and the consideration of Missouri's redesignation request for this standard, the St. Louis area is not subject to the section 182(a)(2)(B) requirement because the St. Louis area was designated as nonattainment for the 2008 ozone standard after the enactment of the 1990 CAA amendments.

Regarding the source permitting and offset requirements of section 182(a)(2)(C) and section 182(a)(4), as previously noted,

¹¹ See 65 FR 31482 (June 18, 2000) and 61 FR 10968 (March 18, 1996).

Missouri currently has a fully-approved part D NSR program in place. The state's "Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard" submitted in September 2014, included an offset ratio. As noted in the September 2014 SIP revision, the requirement for emission offset reductions is part of Missouri's NSR program and codified in the state's regulations at 10 CSR 10-6.060(7)(B)1. The corresponding offset ratio for each ozone area classification (i.e. 1.1:1 for Marginal) is found in the Federal code at 40 CFR 51.165(a)(3)(9). Thus Missouri has satisfied the CAA section 182(a)(4) requirement for Marginal Area Plan submissions in establishing a Marginal Area emission offset reduction ratio of 1.1:1 in its NSR program by SIP-approved rule consistent with the corresponding Federal code. EPA approved the September 2014 SIP revision on February 25, 2016 (81 FR 9346).

Section 182(a)(3) requires states to submit periodic emission inventories and a revision to the SIP to require the owners or operators of stationary sources to annually submit emission statements documenting actual VOC and NO_x emissions. As discussed below, Missouri will continue to update its emissions inventory at least once every three years. With regard to

stationary source emission statements, EPA last approved Missouri's emission statement rule on March 19, 2015 (80 FR 14312). In MDNR's May 22, 2015 submittal, Missouri stated that this approved SIP regulation remains in place and remains enforceable for the 2008 ozone standard. The state's "Marginal Area Plan for the Missouri Portion of the St. Louis Nonattainment Area for the 2008 8-Hour Ground Level Ozone National Ambient Air Quality Standard" SIP revision submitted in September 2014, noted that SIP approved state regulation 10 CSR 10-6.110 *Reporting Emission Data, Emission Fees, and Process Information* requires permitted sources to file an annual report on air pollutant emissions to include emissions data, process information, and annual emissions fees. EPA approved the September 2014 SIP revision on February 25, 2016 (81 FR 9346).

EPA is proposing to approve that the Missouri portion of the St. Louis area has satisfied all applicable requirements for purposes of redesignation under section 110 and part D of title I of the CAA.

2. The St. Louis Area Has a Fully Approved SIP for Purposes of Redesignation Under Section 110(k) of the CAA

As discussed above, EPA has fully approved the Missouri SIP for the St. Louis area under section 110(k) all requirements

applicable for purposes of redesignation under the 2008 ozone NAAQS. EPA may rely on prior SIP approvals in approving a redesignation request (see the Calcagni memorandum at page 3; *Southwestern Pennsylvania Growth Alliance v. Browner*, 144 F.3d 984, 989-90 (6th Cir. 1998); *Wall v. EPA*, 265 F.3d 426), plus any additional measures it may approve in conjunction with a redesignation action (see 68 FR 25426 (May 12, 2003) and citations therein). Missouri has adopted and submitted, and EPA has fully approved at various times, provisions addressing the various SIP elements applicable for the ozone NAAQS.

As indicated above, EPA believes that the section 110 elements that are neither connected with nonattainment plan submissions nor linked to an area's nonattainment status are not applicable requirements for purposes of redesignation. EPA has approved all part D requirements applicable for purposes of this redesignation.

C. Criteria (3)- The Air Quality Improvement in the St. Louis area is Due to Permanent and Enforceable Emission Reductions.

To support the redesignation of an area from nonattainment to attainment, section 107(d)(3)(E)(iii) of the CAA requires EPA to determine that the air quality improvement in the area is due

to permanent and enforceable reductions in emissions resulting from the implementation of the SIP and applicable Federal air pollution control regulations and other permanent and enforceable emission reductions. EPA is proposing to determine that Missouri has demonstrated that the observed ozone air

quality improvement in the St. Louis area is due to permanent and enforceable reductions in VOC and NO_x emissions resulting from state measures adopted into the SIP and Federal measures.

In making this demonstration, the state has calculated the change in emissions between 2011 and 2014. The reduction in emissions and the corresponding improvement in air quality over this time period can be attributed to a number of regulatory control measures that the St. Louis area and upwind areas have implemented in recent years. Based on the information summarized below, Missouri has adequately demonstrated that the improvement in air quality is due to permanent and enforceable emissions reductions.

1. Permanent and Enforceable Emission Controls Implemented

- a. Regional NO_x Controls

Clean Air Interstate Rule (CAIR)/Cross State Air Pollution Rule (CSAPR)/CSAPR Update. CAIR created regional cap-and-trade programs to reduce sulfur dioxide (SO₂) and NO_x emissions in twenty seven eastern states, including Missouri, that contributed to downwind nonattainment and maintenance of the 1997 8-hour ozone NAAQS and the 1997 fine particulate matter (PM_{2.5}) NAAQS. See 70 FR 25162 (May 12, 2005). EPA approved

Missouri's CAIR regulations into the Missouri SIP on December 14, 2007 (72 FR 71073). In 2008, the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) initially vacated CAIR, *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur to preserve the environmental benefits provided by CAIR, *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008). On August 8, 2011 (76 FR 48208), acting on the D.C. Circuit's remand, EPA promulgated CSAPR to replace CAIR and thus to address the interstate transport of emissions contributing to nonattainment and interfering with maintenance of the two air quality standards covered by CAIR as well as the 2006 PM_{2.5} NAAQS. CSAPR requires substantial reductions of SO₂ and NO_x emissions from electric generating units (EGUs) in 28 states in the Eastern United States.

The D.C. Circuit's initial vacatur of CSAPR was reversed by the United States Supreme Court on April 29, 2014, and the case was remanded to the D.C. Circuit to resolve remaining issues in accordance with the high court's ruling. *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584 (2014).¹² On remand, the D.C. Circuit affirmed CSAPR in most respects, but invalidated without

¹² *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7, 38 (D.C. Cir. 2012)

vacating some of the CSAPR budgets as to a number of states. *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118 (D.C. Cir. 2015). This litigation ultimately delayed implementation of CSAPR for three years, from January 1, 2012, when CSAPR's cap-and-trade programs were originally scheduled to replace the CAIR cap-and-trade programs, to January 1, 2015. Thus, the rule's Phase 2 budgets that were originally promulgated to begin on January 1, 2014, began on January 1, 2017.

On November 21, 2014, the Administrator signed an action that published in the **Federal Register** on December 3, 2014 (79 FR 71163), amending the regulatory text of CSAPR to reflect the Court's October 23, 2014, order tolling all deadlines in CSAPR by three years, including provisions governing the sunset of CAIR. CAIR therefore sunset at the end of 2014 and was replaced by CSAPR beginning January 1, 2015, which continue to remain in place. Relative to CAIR, CSAPR required similar or greater emission reductions from relevant upwind areas starting in 2015 and beyond, and Missouri's emissions budgets were not affected by the Court's remand of some of the ozone-season and SO₂ budgets.

While the reduction in NO_x emissions from the implementation of CSAPR will result in lower concentrations of transported

ozone and ozone precursors entering the St. Louis area throughout the maintenance period, EPA is proposing to approve the redesignation of the St. Louis area without relying on those measures within Missouri as having led to attainment of the 2008 ozone NAAQS or contributing to maintenance of that standard because, as noted above, CSAPR did not go into effect until January 1, 2015. As a general matter, EPA expects that the implementation of CSAPR will preserve the reductions achieved by CAIR and result in additional SO₂ and NO_x emission reductions throughout the maintenance period.

In addition, on October 26, 2016 (81 FR 74504), EPA finalized the Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS (CSAPR Update). This new rule replaces the CSAPR rule for purposes of transport of ozone pollution with respect to the 2008 ozone NAAQS. The finalized rule issued a Federal Implementation Plan (FIP) that generally provided updated CSAPR NO_x ozone season emission budgets for the EGUs within twenty two states in the eastern United States, and implements these budgets via modifications to the CSAPR NO_x ozone season allowance trading program established under the original CSAPR. The CSAPR Update rule became effective on December 27, 2016.

b. Federal and State Emission Control Measures

Reductions in VOC and NO_x emissions have occurred statewide and in upwind areas as a result of Federal emission control measures, with additional emission reductions expected to occur in the future. Federal emission control measures are described below.

Tier 2 Emission Standards for Vehicles and Gasoline Sulfur Standards. On February 10, 2000 (65 FR 6698), EPA promulgated Tier 2 motor vehicle emission standards and gasoline sulfur control requirements. These emission control requirements result in lower VOC and NO_x emissions from new cars and light duty trucks, including sport utility vehicles. With respect to fuels, this rule required refiners and importers of gasoline to meet lower standards for sulfur in gasoline, which were phased in between 2004 and 2006. By 2006, refiners were required to meet a 30 ppm average sulfur level, with a maximum cap of 80 ppm. This reduction in fuel sulfur content ensures the effectiveness of low emission-control technologies. The Tier 2 tailpipe standards established in this rule were phased in for new vehicles between 2004 and 2009. EPA estimates that, when fully implemented, this rule will cut NO_x and VOC emissions from light-duty vehicles and light-duty trucks by approximately 76 and 28 percent, respectively. NO_x and VOC reductions from medium-duty passenger

vehicles included as part of the Tier 2 vehicle program are estimated to be approximately 37,000 and 9,500 tons per year, respectively, when fully implemented. In addition, EPA estimates that beginning in 2007, a reduction of 30,000 tons per year of NO_x will result from the benefits of sulfur control on heavy-duty gasoline vehicles. Some of these emission reductions occurred by the attainment years and additional emission reductions will occur throughout the maintenance period, as older vehicles are replaced with newer, compliant model years.

Heavy-Duty Diesel Engine Rules. In July 2000, EPA issued a rule for on-highway heavy-duty diesel engines that includes standards limiting the sulfur content of diesel fuel. Emissions standards for NO_x, VOC and PM were phased in between model years 2007 and 2010. In addition, the rule reduced the highway diesel fuel sulfur content to 15 parts per million by 2007, leading to additional reductions in combustion NO_x and VOC emissions. EPA has estimated future year emission reductions due to implementation of this rulemaking. Nationally, EPA estimated that 2015 NO_x and VOC emissions would decrease by 1,260,000 tons and 54,000 tons, respectively. Nationally, EPA estimated that 2030 NO_x and VOC emissions will decrease by 2,570,000 tons and 115,000 tons, respectively.

Nonroad Diesel Rule. On June 29, 2004 (69 FR 38958), EPA issued a rule adopting emissions standards for nonroad diesel engines and sulfur reductions in nonroad diesel fuel. This rule applies to diesel engines used primarily in construction, agricultural, and industrial applications. The rule is being phased between 2008 through 2015, and when fully implemented will reduce emissions of NO_x, VOC, particulate matter, and carbon monoxide from these engines. It is estimated that compliance with this rule will cut NO_x emissions from these nonroad diesel engines by approximately 90 percent nationwide.

Nonroad Spark-Ignition Engines and Recreational Engine Standards. On November 8, 2002 (67 FR 68242), EPA adopted emission standards for large spark-ignition engines such as those used in forklifts and airport ground-service equipment; recreational vehicles such as off-highway motorcycles, all-terrain vehicles, and snowmobiles; and recreational marine diesel engines. These emission standards are phased in from model year 2004 through 2012. When fully implemented, EPA estimates an overall 72 percent reduction in VOC emissions from these engines and an 80 percent reduction in NO_x emissions. Some of these emission reductions occurred by the attainment years and additional emission reductions will occur throughout the

maintenance period.

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines. On March 3, 2010 (75 FR 9684), EPA issued a rule to reduce hazardous air pollutants from existing diesel powered stationary reciprocating internal combustion engines, also known as compression ignition engines. Amendments to this rule were finalized on January 14, 2013 (78 FR 6674). EPA estimated that when this rule was fully implemented in 2013, NO_x and VOC emissions from these engines would be reduced by approximately 9,600 and 36,000 tons per year, respectively.

Category 3 Marine Diesel Engine Standards. On April 30, 2010 (75 FR 22896), EPA issued emission standards for marine compression-ignition engines at or above 30 liters per cylinder. Tier 2 emission standards apply beginning in 2011, and are expected to result in a 15 to 25 percent reduction in NO_x emissions from these engines. Final Tier 3 emission standards apply beginning in 2016 and are expected to result in approximately an 80 percent reduction in NO_x from these engines. Some of these emission reductions occurred by the attainment years and additional emission reductions will occur throughout the maintenance period.

c. Control Measures Specific to the St. Louis Area

Gateway Vehicle Inspection Program. On March 3, 2015 (80 FR 11323), EPA approved Missouri's Gateway Vehicle Inspection Program which is found in the Missouri Code of State Regulation (CSR) at 10 CSR 5.381. This regulation is permanent and enforceable, and will result in continued significant reductions in both NO_x and VOC emissions from 2014 to 2030.

2. Emission Reductions

Missouri is using a 2011 emissions inventory as the nonattainment base year. Area, nonroad mobile, onroad mobile, and point source emissions (EGUs and non-EGUs) were collected from the Ozone NAAQS Implementation Modeling platform (2011v6.1). MDNR also provided an emissions inventory for wildfires (Event) and biogenic sources. For 2011, this represents actual data Missouri reported to EPA for the 2011 National Emissions Inventory (NEI). Because emissions from state inventory databases, the NEI, and the Ozone NAAQS Emissions Modeling platform are annual totals, tons per summer day (tpd) were derived according to EPA's guidance document "Temporal Allocation of Annual Emissions Using EMCH Temporal Profiles" dated April 29 2002, using the temporal allocation references accompanying the 2011v6.1 modeling inventory files.

For the attainment inventory, Missouri used 2014, one of the years the St. Louis area monitored attainment of the 2008 ozone standard. Because the 2014 NEI inventory was not available at the time MDNR was compiling the redesignation request, the state was unable to use the 2014 NEI inventory directly. For area, nonroad mobile, wildfire, and biogenic sources, 2014 emissions were derived by interpolating between 2011 and 2018 Ozone NAAQS Emissions Modeling platform inventories. The point source sector for the 2014 inventory was developed using actual 2014 point source emissions reported to the state database, which serve as the basis for the point source emissions reported to EPA for the NEI. Summer day inventories were derived for these sectors using the methodology described above. Finally, onroad mobile source emissions were developed using the same methodology described above for the 2011 inventory.

Using the inventories described above, Missouri's submittal documents changes in VOC and NO_x emissions from 2011 to 2014 for the Missouri portion of the St. Louis area. Emissions data are shown in tables 2 through 6.

Table 2: Missouri Portion of the St. Louis Area NO_x Emissions for Nonattainment Year 2011 (tpd)

County	Point	Area	Onroad	Nonroad
Franklin	27.75	0.49	7.83	5.72
Jefferson	16.66	0.62	12.45	3.33
St. Charles	25.04	0.68	21.04	8.34
St. Louis	16.74	2.65	66.34	23.85
St. Louis City	4.49	1.16	16.55	6.31
Total	90.68	5.60	124.21	47.55

Table 3: Missouri Portion of the St. Louis Area VOC Emissions for Nonattainment Year 2011 (tpd)

County	Point	Area	Onroad	Nonroad
Franklin	2.52	3.36	2.4	3.31
Jefferson	1.63	7.48	4.24	3.12
St. Charles	3.34	11.21	6.73	6.23
St. Louis	3.5	38.68	20.17	22.99
St. Louis City	3.59	12.04	4.46	3.38
Total	14.58	72.77	38.00	39.03

Table 4: Missouri Portion of the St. Louis Area NO_x Emissions for Attainment Year 2014 (tpd)

County	Point	Area	Onroad	Nonroad
Franklin	21.13	0.46	8.00	5.24
Jefferson	17.96	0.42	12.87	3.04
St. Charles	21.05	0.89	19.68	7.40
St. Louis	16.79	3.77	60.29	17.53
St. Louis City	4.78	0.93	10.92	5.23
Total	81.71	6.47	111.76	38.44

Table 5: Missouri Portion of the St. Louis Area VOC Emissions for Attainment Year 2014 (tpd)

County	Point	Area	Onroad	Nonroad
Franklin	2.08	5.80	2.57	2.91
Jefferson	1.91	5.44	4.65	2.72
St. Charles	4.12	11.50	7.75	5.25
St. Louis	2.87	35.88	19.01	19.61
St. Louis City	2.88	11.19	4.23	2.92
Total	13.86	69.81	38.21	33.42

Table 6: Change in NO_x and VOC Emissions in the Missouri Portion of the St. Louis Area Between 2011 and 2014 (tpd)

	NO _x			VOC		
	2011	2014	Net Change	2011	2014	Net Change
Point	90.68	81.70	-8.98	14.58	13.86	-0.72
Area	5.60	6.47	0.87	72.77	69.81	-2.96
Onroad	124.21	111.76	-12.45	38.00	38.21	0.21
Nonroad	47.55	38.44	-9.11	39.03	33.42	-5.61
Total	268.04	238.37	-29.67	164.38	155.30	-9.08

As indicated in table 6, total NO_x and VOC emissions decreased by nearly 30 and 9 tpd respectively from the base year to the attainment year.¹³ Based on the control measures identified above in conjunction with the emission reductions, Missouri has adequately demonstrated that the improvement in air quality is due to permanent and enforceable emission reductions.

D. Criteria (4)- The Area Has a Fully Approvable Ozone Maintenance Plan Pursuant to Section 175 of the CAA.

As one of the criteria for redesignation to attainment, section 107(d) (3) (E) (iv) of the CAA requires EPA to determine

¹³ In a letter submitted by MDNR and received by EPA August 7, 2017, the state provided clarifying information on NO_x and VOC emissions. This letter and the original submission can be found in the docket for this action.

that the area has a fully approved maintenance plan pursuant to section 175A of the CAA. Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the maintenance plan must demonstrate continued attainment of the NAAQS for at least ten years after the Administrator approves a redesignation to attainment. Eight years after the redesignation, the state must submit a revised maintenance plan which demonstrates that attainment of the NAAQS will continue for an additional ten years beyond the initial ten year maintenance period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures, as EPA deems necessary, to assure prompt correction of the future NAAQS violation.

In conjunction with its request to redesignate the Missouri portion of the St. Louis area to attainment for the 2008 ozone standard, MDNR submitted a SIP revision to provide for maintenance of the 2008 ozone standard through 2030, more than ten years after the expected effective date of the redesignation to attainment. As discussed below, EPA is proposing that this maintenance plan meets the requirements for approval under section 175A of the CAA.

The Calcagni Memorandum provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five elements: (1) an attainment emission inventory; (2) a maintenance demonstration; (3) a commitment for continued air quality monitoring; (4) a process for verification of continued attainment; and (5) a contingency plan. EPA is proposing to find that Missouri's ozone maintenance plan includes these necessary components and, as part of this action, is proposing to approve the maintenance plan as a revision of the Missouri SIP.

1. Attainment Emissions Inventory

EPA is proposing to determine that the St. Louis area has attained the 2008 ozone NAAQS based on monitoring data for the period of 2013-2015. As previously stated, MDNR selected 2014 as the attainment emissions inventory year to establish attainment emission levels for NO_x and VOC. The attainment emissions inventory identifies the levels of emissions in the Missouri portion of the St. Louis area that are sufficient to attain the 2008 ozone NAAQS. The derivation of the attainment year emissions is discussed above in section IV of this proposed rule. The attainment level emissions, by source category, are summarized in tables 4 and 5.

2. Maintenance Demonstration

Missouri has demonstrated maintenance of the 2008 ozone standard through 2030 by assuring that current and future emissions of VOC and NO_x for the St. Louis area remain at or below attainment year emission levels. A maintenance demonstration does not need to be based on modeling.¹⁴

Missouri used emissions for the 2014 year as a baseline and compared them to projected emissions for 2020 and 2030 to demonstrate maintenance. The year 2030 is more than ten years after the expected effective date of the redesignation to attainment and the year 2020 was selected to demonstrate that emissions are not expected to spike in the interim between the attainment year and the final maintenance year. The emissions inventories were developed as described below.

For point, area, and nonroad emissions inventory development, Missouri estimated 2030 emissions by using the 2014 base year inventory and applying growth factors appropriate for each source category. For area sources, Stage II refueling

¹⁴ See *Wall v. EPA*, 265 F.3d 426 (6th Cir. 2001), *Sierra Club v. EPA*, 375 F.3d 537 (7th Cir. 2004). See also 66 FR 53094, 66 FR 53099-66 FR 53100 (October 19, 2001), 68 FR 25413, 68 FR 25430- 68 FR 25432 (May 12, 2003).

emissions were calculated using MOVES and assumed that Stage II vehicle refueling vapor recovery controls would no longer be required by 2030.¹⁵

For non-EGU and nonpoint emissions inventory development, Missouri collected data from the 2011NEIv2-based platform (2011v6.2) inventories for years 2011, 2017, and 2025. Missouri then calculated growth factors for years 2017 and 2025 by dividing 2011 annual emissions by 2017 and 2025 annual emissions. Then, to estimate 2020 and 2030 growth factors, the program interpolated the 2017 and 2025 growth factors and then extrapolated to 2030. Missouri then used the TREND function in Excel to obtain data for 2026-2030. Summer day inventories were derived for these sectors using the methodology described above.

For EGU emissions, Missouri decided to use 2011v6.2 emissions from 2017 for 2020 and emissions from 2025 for 2030 because MDNR believes that it was not appropriate to use the same growth methodology for non-EGUs and EGUs, as growth in the EGU sector depends on energy demand and environmental, transmission, dispatch, and reliability constraints.

¹⁵ Missouri developed and submitted a SIP revision to remove Stage II vapor recovery requirements in the Missouri portion of the St. Louis-St. Charles-Farmington, MO-IL area. EPA approved the revision and the action became effective on December 10, 2015. *See* 80 FR 69602.

Finally, onroad mobile source emissions were developed using EPA's MOVES program with Vehicle Miles Traveled (VMT) data gathered from the East-West Gateway Council of Governments (EWGW) in coordination with the St. Louis Transportation Conformity Interagency Consultation Group. Missouri specifically used MOVES version 2014a-20151201 as it was the latest release at the time of inventory development. In developing the future year inventories, Missouri developed several future year model input tables, specifically age distribution, VMT, and vehicle population tables for 2020 and 2030. These input tables were developed with the help of MODOT, the Federal Highway Administration, and the EWGW. The emissions data for 2020 and 2030 is shown below in tables 7 through 11.

Table 7: Missouri Portion of the St. Louis Area NO_x Emissions for Interim Maintenance Year 2020 (tpd)

County	Point	Area	Onroad	Nonroad
Franklin	30.92	3.11	5.99	4.03
Jefferson	23.58	1.18	4.99	2.19
St. Charles	8.82	2.41	7.89	5.28
St. Louis	21.19	6.37	23.60	12.65
St. Louis City	4.09	3.79	3.95	4.13
Total	88.6	16.87	46.42	28.27

Table 8: Missouri Portion of the St. Louis Area VOC Emissions for Interim Maintenance Year 2020 (tpd)

County	Point	Area	Onroad	Nonroad
Franklin	2.50	5.87	7.89	2.06
Jefferson	1.75	5.38	2.41	2.17
St. Charles	4.17	11.39	3.90	4.21
St. Louis	3.06	35.03	10.47	17.84
St. Louis City	2.84	11.16	1.97	2.44
Total	14.32	68.86	26.64	28.71

Table 9: Missouri Portion of the St. Louis Area NO_x Emissions for Interim Maintenance Year 2030 (tpd)

County	Point	Area	Onroad	Nonroad
Franklin	30.92	2.20	3.22	1.97
Jefferson	27.72	0.88	2.73	2.32
St. Charles	8.87	1.81	4.34	5.88
St. Louis	21.75	5.44	13.10	16.93
St. Louis City	3.82	2.70	2.18	2.80
Total	93.08	13.03	25.57	29.90

Table 10: Missouri Portion of the St. Louis Area VOC Emissions for Interim Maintenance Year 2030 (tpd)

County	Point	Area	Onroad	Nonroad
Franklin	2.32	5.82	5.45	1.79
Jefferson	1.96	5.38	1.70	2.13
St. Charles	4.17	11.38	2.72	4.04
St. Louis	3.08	35.11	7.21	19.45
St. Louis City	2.78	11.12	1.34	2.60
Total	14.31	68.80	18.42	30.01

Table 11: Change in NO_x and VOC Emissions in the Missouri Portion of the St. Louis Area Between 2014 and 2030 (tpd)

	NO _x				VOC			
	2014	2020	2030	Net Change (2014-2030)	2014	2020	2030	Net Change (2014-2030)
Point	81.70	88.6	93.08	11.38	13.86	14.32	14.31	0.45
Area	6.47	16.87	13.03	6.58	69.81	68.86	68.80	-1.01
Onroad	111.76	46.42	25.57	-86.19	38.21	26.64	18.42	-19.79
Nonroad	38.44	28.27	29.90	-8.54	33.42	28.71	30.01	-3.41
Total	238.37	180.16	161.58	-76.79	155.30	138.53	131.54	-23.76

In summary, the maintenance demonstration for the Missouri portion of the St. Louis area demonstrates maintenance of the 2008 ozone standard. It does so by providing emissions information that future emissions of NO_x and VOC will remain at or below 2014 emission levels when taking into account both future source growth and implementation of future controls.

Table 11 shows NO_x and VOC emissions in the Missouri portion of the St. Louis area are projected to decrease by 76.79 tpd and 23.76 tpd, respectively, between 2014 and 2030.

In addition, since the St. Louis area covers both Missouri and Illinois, MDNR provided data from the Illinois portion of the St. Louis area. This data is summarized below in table 12 and shows that the Illinois portion of the St. Louis area will also show decreases in NO_x and VOC emissions from 2014 to 2030. This data is provided here for informational purposes only as the EPA is not proposing to redesignate the Illinois portion of the St. Louis area in this action.

Table 12: Change in NO_x and VOC Emissions in the Illinois Portion of the St. Louis-St. Charles-Farmington, MO-IL Area
Between 2014 and 2030 (tpd)

	NO _x				VOC			
	2014	2020	2030	Net Change (2014-2030)	2014	2020	2030	Net Change (2014-2030)
Point	23.29	16.81	16.93	-6.36	9.38	9.03	8.53	-0.84
Area	1.53	1.51	1.51	-0.02	19.06	18.39	18.05	-1.00
Onroad	26.94	13.22	6.71	-20.24	10.11	6.38	3.76	-6.36
Nonroad	24.62	18.44	11.31	-13.31	7.47	5.65	5.09	-2.38
Total	76.38	49.98	36.46	-39.93	46.02	39.45	35.43	-10.58

3. Continued Air Quality Monitoring

MDNR has committed to continue to operate the ozone monitors listed in table 1 above and has committed to consult with the EPA prior to making changes to the existing monitoring

network should changes become necessary in the future. Missouri remains obligated to meet monitoring requirements and continue to quality assure monitoring data in accordance with 40 CFR part 58, and to enter all data into the Air Quality System (AQS) in accordance with Federal guidelines. EPA approved Missouri's monitoring plan on December 19, 2017. See <https://www.epa.gov/mo/region-7-states-air-quality-monitoring-plans-missouri>

4. Verification of Continued Attainment

The State of Missouri has the legal authority to enforce and implement the requirements of the maintenance plan for the Missouri portion of the St. Louis area. This includes the authority to adopt, implement, and enforce any subsequent emission control measures determined to be necessary to correct future ozone attainment problems.

Verification of continued attainment is accomplished through operation of the ambient ozone monitoring network and the periodic update of the area's emissions inventory. MDNR will continue to operate the current ozone monitors located in the Missouri portion of the St. Louis area. There are no plans to

discontinue operation, relocate, or otherwise change the existing ozone monitoring network other than through revisions in the network approved by the EPA.¹⁶

In addition, to track future levels of emissions, MDNR will continue to develop and submit to the EPA updated emission inventories for all source categories at least once every three years, consistent with the requirements of 40 CFR part 51, subpart A, and in 40 CFR 51.122. The Consolidated Emissions Reporting Rule (CERR) was promulgated by EPA on June 10, 2002 (67 FR 39602). The CERR was replaced by the Annual Emissions Reporting Requirements (AERR) on December 17, 2008 (73 FR 76539). The most recent triennial inventory for Missouri was compiled for 2014. Point source facilities are covered by Missouri's emission statement rule, 10 CSR 10-6.110 (Reporting Emission Data, Emission Fees, and Process Information), and they will continue to submit VOC and NO_x emissions on an annual basis.

5. Contingency Measures in the Maintenance Plan

Section 175A of the CAA requires that the state must adopt a maintenance plan, as a SIP revision, that includes such contingency measures as the EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that

¹⁶EPA approved the 2016 Missouri Monitoring Network Plan on December 29, 2016.

occurs after redesignation of the area to attainment of the NAAQS. The maintenance plan must identify the following items: The contingency measures to be considered and, if needed for maintenance, adopted and implemented; a schedule and procedure for adoption and implementation; and, a time limit for action by the state. The state should also identify specific indicators to be used to determine when the contingency measures need to be considered, adopted, and implemented. The maintenance plan must include a commitment that the state will implement all measures with respect to the control of the pollutant that were contained in the SIP before redesignation of the area to attainment in accordance with section 175A(d) of the CAA.

As required by section 175A of the CAA, Missouri has adopted a contingency plan for the Missouri portion of the St. Louis area to address possible future ozone air quality problems. The contingency plan adopted by Missouri has two levels of response, a warning level response and an action level response.

In Missouri's plan, a Level I warning would occur if the fourth highest 8-hour ozone concentration at any monitoring site in the maintenance area (including sites in Missouri and Illinois) exceeds 0.079 ppm in any year. A warning level

response will consist of Missouri conducting a study to determine whether the ozone value indicates a trend toward higher ozone values or whether emissions appear to be increasing. The study will evaluate whether the trend, if any, is likely to continue and, if so, the control measures necessary to reverse the trend. The evaluation will be completed as expeditiously as possible, but no later than twenty-four months after MDNR has determined that a Level I trigger has occurred.

In Missouri's plan, an action Level II response is triggered when a violation (based on the average of the last three (3) years' 4th highest maximum daily 8-hour average concentrations (40 CFR 50.15)) of the NAAQS at any monitoring station in the maintenance area occurs. When an action level response is triggered, MDNR will conduct an analysis to determine the appropriate measures to address the cause of the violation. This analysis will be completed within six months of the violation. Selected measures will be implemented as expeditiously as practicable, taking into consideration the ease of implementation and the technical and economic feasibility of the selected measure. The state committed to the implementation of contingency measures, under Level I or Level II triggers, taking place as expeditiously as practicable, but in no event

later than twenty-four months after the state makes a determination that a trigger has occurred, based on quality-assured ambient data that has been entered into AQS. Missouri included the following list of potential contingency measures in its maintenance plan:

- Identify local sources with significant NO_x and/or VOC emissions and develop controls through rules, NSR/PSD permits, or consent agreements;
- Work with MODOT and EWGW to implement transportation control measures (TCMs) through the Transportation Planning Process;
- Lower the applicability thresholds in existing rules that control NO_x and VOCs;
- Lower emission limits in existing rules, specifically revisit current RACT rules;
- Develop new, or strengthen Alternative Control Techniques (ACTs) and Control Technique Guidelines (CTGs) for NO_x and VOC sources;
- Develop rules to address contributing parts of Missouri outside of the St. Louis-St. Charles-Farmington, MO-IL area;
- Enhance the Heavy-Duty Diesel Anti-Idling Program;

- Update 10 CSR 10-6.130 (Controlling Emissions During Episodes of High Air Pollution Potential), specifically: Lowering the alert/action trigger levels, amending the rule to require alert/action level abatement plans at more facilities, and requiring existing abatement plans to be amended with more current emission reduction measures;
- Review other states' or multi-state organizations' rules and determine their applicability and effectiveness (i.e., reviewing the Ozone Transport Commission (OTC) model rules).

EPA has concluded that the maintenance plan adequately addresses the five basic components of a maintenance plan: an attainment emission inventory, a maintenance demonstration, continued air quality monitoring, verification of continued attainment, and a contingency plan. In addition, as required by section 175A(b) of the CAA, the state has committed to submit to the EPA an updated ozone maintenance plan eight years after redesignation of the Missouri portion of the St. Louis-St. Charles-Farmington, MO-IL area to cover an additional ten years beyond the initial ten-year maintenance period. Thus, the maintenance plan SIP revision submitted by MDNR for the Missouri

portion of the St. Louis area meets the requirements of section 175A of the CAA, EPA proposes to approve it as a revision to the Missouri SIP.

V. Has the State Adopted Approvable Motor Vehicle Emission Budgets?

A. Motor Vehicle Emission Budgets

Under section 176(c) of the CAA, new transportation plans, programs, or projects that receive Federal funding or support, such as the construction of new highways, must "conform" to (i.e., be consistent with) the SIP. Conformity to the SIP means that transportation activities will not cause new air quality violations, worsen existing air quality problems, or delay timely attainment of the NAAQS or interim air quality milestones. Regulations at 40 CFR part 93 set forth the EPA policy, criteria, and procedures for demonstrating and assuring conformity of transportation activities to a SIP. Transportation conformity is a requirement for nonattainment and maintenance areas. Maintenance areas are areas that were previously nonattainment for a particular NAAQS, but that have been redesignated to attainment with an approved maintenance plan for the NAAQS.

Under the CAA, states are required to submit, at various times, control strategy SIPs for nonattainment areas and maintenance plans for areas seeking redesignations to attainment of the ozone standard and maintenance areas.¹⁷ These control strategy SIPs (including reasonable further progress plans and attainment plans) and maintenance plans must include MVEBs for criteria pollutants, including ozone, and their precursor pollutants (VOC and NO_x for ozone) to address pollution from onroad transportation sources. The MVEBs are the portion of the total allowable emissions that are allocated to highway and transit vehicle use that, together with emissions from other sources in the area, will provide for attainment or maintenance.¹⁸

Under 40 CFR part 93, a MVEB for an area seeking a redesignation to attainment must be established, at minimum, for the last year of the maintenance plan; a state may adopt MVEBs for other years as well. The MVEB serves as a ceiling on emissions from an area's planned transportation system and is further explained in the preamble to the November 24, 1993, Transportation Conformity Rule (58 FR 62188). The preamble

¹⁷ See the SIP requirements for the 2008 ozone standard in the EPA's March 6, 2015 implementation rule (80 FR 12264).

¹⁸ See 40 CFR 93.101.

also describes how to establish the MVEB in the SIP and how to revise the MVEB, if needed, subsequent to initially establishing a MVEB in the SIP.

B. What is the Status of the EPA's Adequacy determination for the proposed VOC and NO_x MVEBs for the St. Louis Area?

When reviewing submitted control strategy SIPs or maintenance plans containing MVEBs, the EPA must affirmatively find that the MVEBs contained therein are adequate for use in determining transportation conformity. Once EPA affirmatively finds that the submitted MVEBs are adequate for transportation purposes, the MVEBs must be used by state and Federal agencies in determining whether proposed transportation projects conform to the SIP as required by section 176(c) of the CAA.

EPA's substantive criteria for determining adequacy of a MVEB are set out at 40 CFR 93.118(e)(4). The process for determining adequacy consists of three basic steps: Public notification of a SIP submission; provision for a public comment period; and EPA's adequacy determination. This process for determining the adequacy of submitted MVEBs for transportation conformity purposes was initially outlined in EPA's May 14, 1999 guidance, "Conformity Guidance on Implementation of March 2, 1999, Conformity Court Decision." EPA adopted regulations to

codify the adequacy process in the Transportation Conformity Rule Amendments for the "New 8-Hour Ozone and PM_{2.5} National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments - Response to Court Decision and Additional Rule Change," on July 1, 2004 (69 FR 40004).

As discussed earlier, Missouri's maintenance plan includes NO_x and VOC MVEBs for the Missouri portion of the St. Louis area for 2014 and 2030, the attainment level year and the last year of the maintenance period. EPA reviewed the VOC and NO_x MVEBs with the adequacy process. Missouri's September 12, 2016 and February 16, 2018, maintenance plan SIP submissions, including the VOC and NO_x MVEBs for the area, were open for public comment on EPA's adequacy Web site on April 10, 2018, at:

<https://www.epa.gov/state-and-local-transportation/adequacy-review-state-implementation-plan-sip-submissions-conformity>.

The EPA public comment period on adequacy of the 2030 MVEBs for the Missouri portion of the St. Louis area closed on May 10, 2018. No comments on the submittal were received during the adequacy comment period. The submitted maintenance plan, which included the MVEBs, was endorsed by the Governor's designee, was subject to a state public hearing, and was developed as part of

an interagency consultation process which includes Federal,

state, and local agencies. These MVEBs, when considered together with all other emissions sources, are consistent with maintenance of the 2008 8-hour ozone standard.

Table 13: MVEBs for the Missouri Portion of the St. Louis Area (tpd)

	Attainment Year 2014 Onroad Emissions	2030 Estimated Onroad Emissions	2030 Mobile Safety Margin Allocation	2030 MVEBs
VOC	38.21	18.42	3.58	22
NO_x	111.76	25.57	14.43	40

As shown in table 13, the 2030 MVEBs exceed the estimated 2030 onroad sector emissions. In an effort to accommodate future variations in travel demand models and vehicle miles traveled forecast, MDNR allocated a portion of the safety margin (described further below) to the mobile sector. Missouri has demonstrated that the Missouri portion of the St. Louis area can maintain the 2008 ozone NAAQS with mobile source emissions in the area of 22 tpd of VOC and 40 tpd of NO_x in 2030, since despite partial allocation of the safety margin, emissions will remain under attainment year emission levels. Based on this analysis, the St. Louis area should maintain attainment of the 2008 ozone NAAQS for the relevant maintenance period with mobile source emissions at the levels of the MVEBs.

Therefore, EPA has found that the MVEBs are adequate and is proposing to approve the MVEBs for use in determining transportation conformity in the Missouri portion of the St. Louis-St. Charles-Farmington, MO-IL area.

C. What is a Safety Margin?

A "safety margin" is the difference between the attainment level of emissions (from all sources) and the projected level of emissions (from all sources) in the maintenance plan. As noted in table 11, the emissions in the Missouri portion of the St. Louis-St. Charles-Farmington, MO-IL area are projected to have safety margins of 76.79 tpd for NO_x and 23.76 tpd for VOC in 2030 (the difference between the attainment year 2014 emissions, and the projected 2030 emissions for all sources in the Missouri portion of the St. Louis-St. Charles-Farmington, MO-IL area). Even if emissions reached the full level of the safety margin, the counties would still demonstrate maintenance since emission levels would equal less than those in the attainment year.

As shown in table 13 above, Missouri is allocating a portion of that safety margin to the mobile source sector. Specifically, in 2030, Missouri is allocating 3.58 tpd and 14.43 tpd of the VOC and the NO_x safety margins, respectively. MDNR is not requesting allocation to the MVEBs of the entire available

safety margins reflected in the demonstration of maintenance. Therefore, even though the state is requesting MVEBs that exceed the projected onroad mobile source emissions for 2030 contained in the maintenance demonstration, the increase in onroad mobile source emissions that can be considered for transportation conformity purposes is well within the safety margins of the ozone maintenance demonstration. Further, once allocated to mobile sources, these safety margins will not be available for use by other sources.

VI. Proposed Action

EPA is proposing to determine that the Missouri portion of the St. Louis nonattainment area is attaining the 2008 ozone standard based on quality-assured and certified monitoring data for 2013-2015 and that the Missouri portion of the St. Louis area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA.

EPA is also proposing to approve the state's request to change the designation of the Missouri portion of the St. Louis area for the 2008 ozone standard from nonattainment to attainment. EPA is also proposing to approve, as a revision to the Missouri SIP, the state's maintenance plan for the area. The maintenance plan is designed to keep the Missouri portion of the

St. Louis area in attainment of the 2008 ozone NAAQS through 2030. Finally, EPA finds adequate and is proposing to approve the newly-established 2030 MVEBs for the Missouri portion of the St. Louis area.

VII. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866.

- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of the National Technology Transfer and Advancement Act (NTTA) because this rulemaking does not involve technical standards; and

- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

The SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control,
Incorporation by reference, Intergovernmental relations,
Nitrogen dioxide, Ozone, Volatile organic compounds.

Dated: June 13, 2018.

James B. Gulliford.
Regional Administrator,
Region 7.